

# Ips confusus

## Scientific Name

*Ips confusus* (LeConte, 1876)

## Synonyms

Common names: piñon ips (English)

## Diagnostic notes

-Has five spines on the elytral declivity, body length less than 4.5 mm, and frons densely tuberculate, without a median fovea, first declivital spine is closer to the second declivital spine than to the suture, third declivital spine obtuse or rounded.

-Males with frons central tubercle present, absent in females.

-Some specimens distinguishable from *I. paraconfusus* and *I. hoppingi* only by characters of the female pars stridens (Lanier, 1970b) and DNA (Cognato and Sun 2007).

-May be sympatric with *I. paraconfusus* in California, and with *I. hoppingi* in Arizona.

## Morphological Summary

### females

**Body.** 3.5-4.2(-5.0) mm long, 2.6-2.7 times longer than wide; pronotum 1.1-1.2 times longer than wide.

**Head.** Epistomal margin with uniseriate row of tubercles with gap at midline. Frons outline convex in lateral view; vestiture fine (not hiding part of integument); surface sculpture near epistoma densely tuberculate-punctate; central carina absent; central tubercle absent, without pair of circular tubercles on either side of midline; transverse carina absent; frons central fovea present; circular tubercles above top of eyes present - up to, or more than one third of all tubercles. Vertex and pronotum with stridulatory apparatus (pars stridens). Antennal club sutures acutely angulate.

**Prothorax.** Protibiae with four socketed teeth on apical half (does not include apical spine).

**Elytra.** Interstriae punctate (observed on interstriae 2 and 3 on middle third of elytral disc), punctures 0.3(-0.4) times diameter of adjacent striae punctures (punctures and striae measured at steepest part of puncture wall), interstitial setae longer than width of scutellar shield, interstriae (4-5)(-6) times as wide as adjacent striae. Elytral declivity with five spines per side, spine 3 largest; spine 1 (largest on 2nd interstria) closer to spine 2 than suture; spines 1 and 2 separated at base by distance less than height of spine 1; spine 2 closer to spine 1 than spine 3; spine 3 hooked, apex obtuse to rounded, with apical half asymmetrical in lateral view; spines 2 and 3 not on shared tumescence, not in line with spines 1 and 4 (posterodorsal view); spine 4 closer to spine 5 than spine 3; declivital integument shiny.



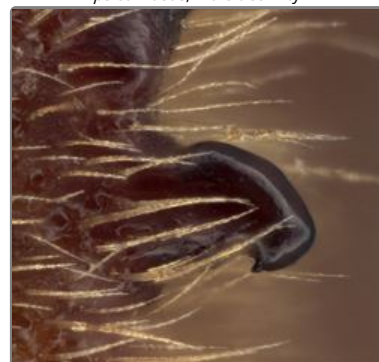
*Ips confusus*, male frons



*Ips confusus*, female frons



*Ips confusus*, male declivity



*Ips confusus*, male declivity, spine 3

**males**

**Body.** 3.5-4.2(-5.0) mm long, 2.6-2.7 times longer than wide; pronotum 1.1-1.2 times longer than wide.

**Head.** Epistomal margin with uniseriate row of tubercles with gap at midline. Frons outline convex in lateral view; vestiture fine (not hiding part of integument); surface sculpture near epistoma densely tuberculate-punctate; central carina present or absent; central tubercle present and single, separated from base of epistomal setae by 0-0.5 tubercle diameters, without pair of circular tubercles on either side of midline; transverse carina absent; frons central fovea present; circular tubercles above top of eyes present - more than one third of all frontal tubercles. Vertex and pronotum without stridulatory apparatus (pars stridens). Antennal club sutures acutely angulate.

**Prothorax.** Protibiae with three socketed teeth on apical half (does not include apical spine).

**Elytra.** Interstriae punctate (observed on interstriae 2 and 3 on middle third of elytral disc), punctures 0.3(-0.4) times diameter of adjacent striae punctures (punctures and striae measured at steepest part of puncture

wall), interstitial setae longer than width of scutellar shield, interstriae (4-5)(6) times as wide as adjacent striae. Elytral declivity with five spines per side, spine 3 largest; spine 1 (largest on 2nd interstria) closer to spine 2 than suture; spines 1 and 2 separated at base by distance less than height of spine 1; spine 2 closer to spine 1 than spine 3; spine 3 hooked, apex obtuse to rounded, with apical half asymmetrical in lateral view; spines 2 and 3 not on shared tumescence, not in line with spines 1 and 4 (posterodorsal view); spine 4 closer to spine 5 than spine 3; declivital integument shiny.

**Geographic Distribution**

Mexico (Baja California Norte); USA (Arizona, California, Colorado, Idaho, Nevada, New Mexico, Utah, Wyoming).

**Hosts**

*Pinus* spp. Known from *P. edulis* and *P. monophylla*.

**Notes**

Clade formed by (((*I. confusus* + *I. hoppingi*) + *I. paraconfusus*) + *I. montanus*), see Cognato and Sun (2007).

**References**

- Cognato, A.I. 2015. Biology, systematics, and evolution of *Ips*. In *Bark beetles: biology and ecology of native and invasive species*. Edited by F.E. Vega and R.W. Hofstetter. Elsevier, San Diego, California. Pp. 351-370.
- Cognato, A.I. and Sun, J.H. 2007. DNA based cladograms augment the discovery of a new *Ips* species from China (Coleoptera: Curculionidae: Scolytinae). *Cladistics*, 23: 539-551.
- EPPO. No date. Data Sheets on Quarantine Pests: *Ips confusus* and *Ips paraconfusus*. European and Mediterranean Plant Protection Organization.
- Wood, S.L. 1982. The bark and ambrosia beetles of North and Central America (Coleoptera: Scolytidae), a taxonomic monograph. *Great Basin Naturalist Memoirs*, 6: 1-1359.

**Internet resources**

[https://www.barkbeetles.info/regional\\_chklist\\_target\\_species.php?lookUp=1706](https://www.barkbeetles.info/regional_chklist_target_species.php?lookUp=1706)



*Ips confusus*, female declivity



*Ips confusus*, male lateral habitus



*Ips confusus* male dorsal habitus

Rotatable image of *Ips confusus* (LeConte 1876)  
(click on dorsal habitus images)

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